[FAST WAVEFORM DISPLAY METHOD AND SYSTEM]

Abstract of Disclosure

Waveform data contains waveform signals having transition events and is subdivided into data blocks. Indexing elements are provided for each waveform signal that correspond to a time range of the waveform data, and have a pointer to a data block within which transition events for the waveform signal are stored. Each indexing element has a maximum interval value that indicates the maximum amount of time spanned between transition events of the waveform signal. A minimum time resolution that may be adequately resolved on the display is computed. For indexing elements having maximum interval values that exceed the minimum time resolution, the pointers of the indexing elements are used to access and draw transition events for the waveform signals. For indexing elements having maximum interval values that are less than the minimum time resolution, a predetermined image in place of transition events for the waveform signals is drawn.

Figures